The "least flow" given above is probably the least flow on any day of the dry season. If, however, our reservoir is to contain, say 6 months' supply, then we desire to know the least average flow for any six months during 20 or more years. Suppose this to be 0.2 cubic feet per second per square mile of drainage area, or 17,280 cubic feet per day per square mile.

Suppose a population of 10,000 consuming daily 6 cubic feet (45 gallons, say) per head, or 60,000 cubic feet in all; and that the loss by evaporation from the reservoir of 10 acres say, is $\frac{1}{8}$ inch daily, or about 5,000 cubic feet. The total daily demand is thus 65,000 cubic feet, which is about 48,000 cubic feet in excess of the supply from the stream; so that if the reservoir is to contain 6 months=180 days of this excess, its available capacity must be $48,000 \times 180 = 8,640,000$ cubic feet, or an average available depth over the 10 acres of 20 feet.

It is evident that if the daily demand, as above, is 65,000 cubic feet, the yearly demand thus being 23,725,000 cubic feet, that but little over 10 inches of rain-fall over the 1 square mile of drainage area has been secured, since 10 inches on a square mile gives only 23,232,000 cubic feet. This is certainly within reasonable bounds.

No allowance is made above for compensation to mill-owners.

Of course, by building the reservoir of sufficient capacity the whole of the rain-fall, minus the loss by absorption, evaporation and leakage, can be utilized; but it has not been found desirable to build such huge reservoirs in actual practice, so that much of the rain-fall is purposely allowed to run off.

Sources of Water Supply in N. C.—Maintenance of Purity.—This State is abundantly supplied with unfailing sources of water supply in her many rivers nnd lakes, not to speak of the underground water, which hitherto has been the only source used in the supply of her largest towns. What a contrast do the rivers and streams of England—many of them fouled to inky blackness by the refuse of thousands of manufactories—present to our own waters, teeming with fish and drinkable almost everywhere. It is to be hoped that the enacting of